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Dan Nelson, Bob Smith, Walt Wadlow,

I have received from CUWA a copy of the CalFed Program Draft Purpose and Need Statement. The wording of this statement is very important. Obtaining a Corps of Engineers 404 permit will require selection of the best environmental alternative that meets the project purposes. If water users' needs are not clearly stated as part of the project purposes, we run the risk of CalFed's choosing, in fact, of being required to choose, an alternative that does not satisfy our needs.

The draft statement is clearly deficient from that standpoint. In fact, the "overall purpose and mission" statement also presents serious problems. I will comment on that statement first.

The overall purpose and mission statement now reads as follows:

Develop and implement a long-term comprehensive plan for ecosystem protection and restoration, (sic) and improved water management for beneficial uses of the Bay-Delta system. (emphasis added)

My comments on each italicized portion are as follows:

"protection and restoration:"

Note that the ecosystem is to be protected and restored. This is a very high standard of performance. Does protected mean protected from everything, such as, for example, any additional exports? Also, there is no way that this ecosystem is going to be restored. We may all have an understanding, insisted upon by CalFed, that "restored" really does not mean "restored," but what does it mean? If the word "restored" remains, what legal obligations arise from that word? Does

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any alternative that does not restore the ecosystem become unacceptable?

## "improved:"

"Improved" does not imply a high standard of performance. Even the slightest positive change might be construed as satisfying the meaning of "improved."

"management:" Does management mean more water? In some people's eyes, management means less water, as in demand management.

Taken together, "improved" and "management" might mean nothing more than increased water conservation programs in export areas, for example.

## "beneficial uses:"

Although it is not apparent here, the CalFed Program seems to equate beneficial uses with environmental uses. Urban and agricultural water supply are beneficial uses. However, even this broad, correct connotation does not reduce the concern we should have over the problems presented by the phrase "improved water management."

A better statement of the overall purpose and mission statement would be as follows:

Develop and implement a long-term comprehensive plan for the Bay-Delta system to achieve specific, feasible ecosystem objectives and specific, feasible water supply benefits for all water users.

Turning to the draft purposes of the CalFed Program, the first one reads as follows:

a) to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta system to support sustainable populations of the fish and wildlife species relying on the Bay-Delta system

This is a very tall order. It is one thing to remove, as limiting factors to fish and wildlife populations, any of the variety of things that can reasonably be controlled. It is entirely another matter to produce sustainable populations. Sustainable populations might be limited by factors, such as introduced species or changes in ocean conditions, that are beyond our control.

Also, where do controls on recreational and commercial fishing and hunting of wildlife fit under this purpose?

A better, more realistic statement would be as follows:

a) to control or manage all controllable, manageable factors affecting fish and wildlife in the Bay-Delta system in such a way that the achievement of sustainable populations of these species is not limited by any of those factors.

The second purpose reads as follows:

b) to provide water of satisfactory quality for all beneficial uses of Bay-Delta system water

This seems like a pretty good statement of a water quality purpose except that it does not recognize the well-established public health principle of taking drinking water from the best available source.

## A better statement would be as follows:

b) to provide water of satisfactory quality for all beneficial uses of Bay-Delta system water and to provide water from the best available source for urban use.

The third statement reads as follows:

c) to minimize conflict among beneficial uses of Eay-Delta system water and reduce the mismatch between Bay-Delta system water supplies and current and projected beneficial uses of the Bay-Delta system for both the short and long-term planning horizons

This is the key purpose for water users, and it is inadequate.

"Minimizing the conflict" and "reducing the mismatch" could be
accomplished by, for example, cutting exports in halfing Delta inflow by
50%. After a while, a lot of ag land would have gone out of production
and urban users would be paying a fortune for drastic measures to
control demand or produce more water, say, by desalting, but there would
be no mismatch.

Water users are participating in this process to get more water out of the Delta in a way that allows for net environmental improvement. Water users also want to improve the Delta water transfer system to ensure that water purchased from willing sellers upstream of the Delta can be moved to buyers in export areas.

Upstream and Delta water users want better protection of their interests.

A better statement of this purpose would be as follows:

c) to improve the Delta water transfer system such that urban and agricultural water users who rely on Delta exports can obtain the water necessary to meet their reasonable needs (those remaining after implementation of Demand Management Programs) by exporting

Water stored upstream of and released into the Delta

Water that is surplus to other Bay-Delta needs

Water purchased from willing upstream sellers by export users,

and such that more water can be provided as necessary for the environment and that the current and future needs of water users in and upstream of the Delta can be protected.

The fourth statement reads as follows:

d) to reduce the risk to land uses and associated economic activities, water supply, infrastructure, and the ecosystem from the gradual deterioration or catastrophic failure of Bay-Delta system levees.

This purpose does not address the nature of the levee vulnerability problem. This problem arises from two general types of levee failure:

The first type is what might be termed "preventable failure." It's the failure that could occur because of overtopping during flood flows or the failure of poorly maintained levees during other times.

The second type is the failure that could occur due to liquefaction of levee soils that are liquefiable or of liquefiable soils

underlying many of the levees. Liquefaction could be induced by an earthquake, and the chances of such an earthquake are high.

The second type of levee failure could result in the flooding of several islands at once, and this could provoke export outages for months.

The first type of levee failure could be addressed by better programs of levee maintenance and improvement. The risk of the second type of failure cannot be appreciably reduced by levee maintenance and improvement because it arises from the condition of soils in or under the levees. There are only two feasible ways to appreciably reduce this risk:

Create conditions in the Delta such that enough water can be stored south of the Delta to provide security against extended export outages if they should occur

and/or

Move the Delta water transport system to the east, where underlying soils are not liquefiable, and design the system to withstand earthquake damage and to be easily repairable if damage should occur.

Although the purpose statement does not rule out consideration of the two types of failure, all of the written materials produced by CalFed so far only address "preventable" failures.

A more appropriate version of the purpose statement would be as follows:

d) to reduce the risk to land uses and associated economic activities, water supply, infrastructure, and the ecosystem from levee failures typical of those that have occurred in the recent past, and to ensure that urban and agricultural water supply shortages resulting from catastrophic failure of one or more levees could be managed without undue hardship on areas dependent on water supplies from or passing through the Delta.

B.J.

cc: CUWA/AG CalFed Process Workgroup